Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Request for Continued Examination (RCE)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL (Submitted Only via EFS-Web)							
Application Number	10539399	Filing Date	2006-10-03	Docket Number (if applicable)	LRM-36144-A-US	Art Unit	3736
First Named Inventor	First Named Henry William Lupton			Examiner Name	John Pani		
This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV							
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in which they entered, appli	were filed unless a cant must request	applicant ins non-entry of	structs otherwise. If a of such amendment(applicant does not wi s).	nents enclosed with the RCE v sh to have any previously filed	l unentered	d amendment(s)
Previously submission	y submitted. If a fir on even if this box	nal Office ac is not checl	ction is outstanding, ked.	any amendments file	ed after the final Office action r	nay be cor	nsidered as a
☐ Co	nsider the argume	ents in the A	appeal Brief or Reply	Brief previously filed	d on		
⊠ Ot	her Enter a	and conside	r the "Amendment a	nd Response under	37 C.F.R. & 1.116" filed on 8/5	5/2010	
Ar	nendment/Reply						
☐ Information Disclosure Statement (IDS)							
Aff	idavit(s)/ Declarat	ion(s)					
MISCELLANEOUS							
Suspens (Period	ion of action on the of suspension sha	e above-ide Il not excee	entified application is d 3 months; Fee und	requested under 37 der 37 CFR 1.17(i) re	CFR 1.103(c) for a period of equired)	months –	
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□ Patent	Practitioner Sign	ature					
Applic	ant Signature						

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Signature of Registered U.S. Patent Practitioner				
Signature	Grady mulie	Date (YYYY-MM-DD) 2	2010-09-02	
Name	Grady J. Frenchick	Registration Number	29018	

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt				
EFS ID:	8162769			
Application Number:	10539399			
International Application Number:				
Confirmation Number:	4662			
Title of Invention:	Guide wire for use with a catheter			
First Named Inventor/Applicant Name:	Henry William Lupton			
Customer Number:	56080			
Filer:	Grady J. Frenchick/Edward Kenrick			
Filer Authorized By:	Grady J. Frenchick			
Attorney Docket Number:	LRM-36144-A-US			
Receipt Date:	05-AUG-2010			
Filing Date:	03-OCT-2006			
Time Stamp:	15:21:40			
Application Type:	U.S. National Stage under 35 USC 371			

Payment information:

Submitted with Payment	yes			
Payment Type	Deposit Account			
Payment was successfully received in RAM	\$130			
RAM confirmation Number	1533			
Deposit Account	232053			
Authorized User				

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)			
		LRM36144AUSresponse.pdf	448456	yes	9			
			48afca897baf272ca1c5562c4e06baf5c84cd d08					
	Multipart Description/PDF files in .zip description							
	Document De	scription	Start	End				
	Amendment A	1	1					
	Claims	2	6					
	Applicant Arguments/Remarks	7	9					
Warnings:			·					
Information:								
2	Fee Worksheet (PTO-875)	fee-info.pdf	30230	no	2 .			
2			cc839953040a78af6907f0b493ff7aad8172f 8a4					
Warnings:								
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		Total Files Size (in bytes): 47	78686				

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Henry William LUPTON

Serial No.

10/539,399

Filing Date

October 3, 2006

For

GUIDE WIRE FOR USE WITH A CATHETER

Confirmation No.

4662

Group Unit

3736

Examiner

PANI, John

Customer No.

56080

CERTIFICATION UNDER 37 CFR 1.8(a) and 1.10

I hereby certify that, on the date shown below, this correspondence is being transmitted via the Patent Electronic Filing System (EFS) addressed to the U.S. Patent and Trademark Office.

Date: <u>4/5</u>

,2010

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Commissioner for Patents

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AMENDMENT AND RESPONSE UNDER 37 C.F.R. § 1.116

Dear Sirs:

This is in reply to the Office Action electronically sent on 04-08-2010 ("the Office Action"). This "Rule 116 Amendment" is being submitted with the express intention of placing all claims in condition for allowance. It is hoped that entry of the minor proposed claim amendments in conjunction with the Remarks below will convince the Examiner that all pending claims are, in fact, allowable and should be immediately passed to issue. This hope is believed to be reasonable in view of the fact that only a narrow 102(e) rejection stands between the present claims and their passage to issue.

This Amendment includes a request for a one (1)-month extension of time to reply to the Office Action and authorization to deduct payment of the associated fee (large entity) from Deposit Account 23-2053.

Claims begin on page 2.

Remarks begin on page 7.

IN THE CLAIMS

1-53. (Canceled).

- 54. (Previously Presented) A guide wire as claimed in claim 70 in which the major flat surfaces of the distal portion define a central major plane located midway between the major surfaces, and the minor surfaces of the distal portion define a central minor plane located midway between the minor surfaces.
- 55. (Previously Presented) A guide wire as claimed in claim 70 in which a reinforcing member is located on each major flat surface.
- 56. Canceled.
- 57. (Previously Presented) A guide wire as claimed in claim 54 in which the reinforcing member extends parallel to the central minor plane.
- 58. (Previously Presented) A guide wire as claimed in claim 54 in which the reinforcing member extends at an angle greater than zero degrees to the central minor plan.
- 59. (Previously Presented) A guide wire as claimed in claim 77 in which the reinforcing member defines opposite longitudinally extending sides, the opposite longitudinally extending sides of the reinforcing member terminating along the longitudinally extending edge of the reinforcing member.
- 60. (Previously Presented) A guide wire as claimed in claim 59 in which the opposite longitudinally extending sides of the reinforcing member are parallel to each other
- 61. (Previously Presented) A guide wire as claimed in claim 70 in which the reinforcing member is integrally formed with the distal portion of the guide wire.
- 62. (Previously Presented) A guide wire as claimed in claim 70 in which the distal portion of the guide wire extends through a sleeve, and a first securing means at the distal end thereof secures the distal portion to the sleeve, the first securing means defining a distal end of the guide wire.

- 63. (Previously Presented) A guide wire as claimed in claim 62 in which the first securing means is shaped to form a dome shaped distal end of the guide wire for facilitating passage of the guide wire smoothly through a vessel of the subject.
- 64. (Previously Presented) A guide wire as claimed in claim 62 characterized in which the guide portion is located between the reinforcing member and the first securing means.
- 65. (Previously Presented) A guide wire as claimed in claim 62 in which the first securing means comprises one of a solder joint, an adhesive joint, or a brazed joint.
- 66. (Previously Presented) A guide wire as claimed in claim 62 in which the sleeve extends in a proximal direction beyond the proximal end of the distal portion along a portion of the guide wire, and a proximal end of the sleeve is secured to the guide wire by a second securing means comprising one of an adhesive joint, a solder joint, or a brazed joint.
- 67. (Previously Presented) A guide wire as claimed in claim 70 in which the guide wire is substantially torsionally rigid between the distal portion and the proximal portion of the guide wire for minimizing axial twisting of the guide wire between the proximal portion thereof and the guide portion.
- 68. Canceled.
- 69. (Previously Presented) In combination a catheter and the guide wire as claimed in claim 7
- 70. (Currently Amended) A guide wire for use in a surgical or other procedure for accessing a remote site in a body of a human or animal subject, the guide wire defining a longitudinally extending axis, and terminating at one end in a proximal portion, and at an axially opposite end in a distal portion for accessing the remote site, the distal portion having a proximal end and a distal end, and being of rectangular transverse cross-section defining a pair of opposite major flat surfaces, joined by a pair of opposite minor surfaces, and terminating adjacent the distal end thereof in a guide portion, the guide portion being adapted to be shaped to a desired curved configuration for facilitating guiding of the guide wire into a branched vessel of the subject, and an elongated reinforcing member located on the distal portion of the guide wire for minimizing axial twisting of the distal portion between the proximal end of the distal portion and the guide

portion thereof, reinforcing member having a proximal end and a distal end, and extending along and being perpendicular to one of the flat major surfaces of the distal portion of the guide wire from the proximal end of the distal portion to a location on the distal portion axially spaced apart from the distal end of the distal portion to define with the distal end of the distal portion the guide portion.

- 71. (Previously Presented) A guide wire as claimed in claim 70 in which the reinforcing member extends in a generally axial direction.
- 72. (Previously Presented) A guide wire as claimed in claim 70 in which the major flat surfaces of the distal portion converge towards each other towards the distal end of the distal portion.
- 73. (Previously Presented) A guide wire as claimed in claim 54 in which the reinforcing member coincides with the central minor plane.
- 74. (Previously Presented) A guide wire as claimed in claim 70 in which the reinforcing member extends adjacent one of the minor surfaces.
- 75. (Previously Presented) A guide wire as claimed in claim 59 in which the opposite longitudinally extending sides of the reinforcing member converge towards the longitudinally extending edge of the reinforcing member for defining the longitudinally extending edge as a longitudinally extending ridge.
- 76. (Previously Presented) A guide wire as claimed in claim 59 in which the longitudinally extending edge of the reinforcing member converges towards the distal portion adjacent the distal end of the reinforcing member.
- 77. (Previously Presented) A guide wire as claimed in claim 70 in which the reinforcing member extends from the major flat surface of the distal portion of the guide wire to a longitudinally extending edge, the longitudinally extending edge extending from the proximal end of the reinforcing member to the distal end of the reinforcing member.

- (New) A guide wire for use in a surgical or other procedure for accessing a remote site in 78. a body of a human or animal subject, the guide wire defining a longitudinally extending axis, and terminating at one end in a proximal portion, and at an axially opposite end in a distal portion for accessing the remote site, the distal portion having a proximal end and a distal end, and being of rectangular transverse cross-section defining a pair of opposite major flat surfaces, joined by a pair of opposite minor surfaces, the minor surfaces defining a central minor plane midway between the minor surfaces, and the major flat surfaces terminating adjacent the distal end thereof in a guide portion, the guide portion being adapted to be shaped to a desired curved configuration for facilitating guiding of the guide wire into a branched vessel of the subject, and an elongated reinforcing member located on the distal portion of the guide wire for minimizing axial twisting of the distal portion between the proximal end of the distal portion and the guide portion thereof, reinforcing member having a proximal end and a distal end, and extending along, and being perpendicular to, one of the flat major surfaces of the distal portion of the guide wire and extending from the proximal end of the distal portion to a location on the distal portion axially spaced apart from the distal end of the distal portion to define with the distal end of the distal portion the guide portion.
- 79. (New) A guide wire as claimed in claim 78 in which the reinforcing member extends in a generally axial direction.
- 80. (New) A guide wire as claimed in claim 78 in which the major flat surfaces of the distal portion converge towards each other towards the distal end of the distal portion.
- 81. (New) A guide wire as claimed in claim 78 in which the reinforcing member extends adjacent one of the minor surfaces.
- 82. (New) A guide wire as claimed in claim 59 in which the opposite longitudinally extending sides of the reinforcing member converge towards the longitudinally extending edge of the reinforcing member for defining the longitudinally extending edge as a longitudinally extending ridge.

- 83. (New) A guide wire as claimed in claim 59 in which the longitudinally extending edge of the reinforcing member converges towards the distal portion adjacent the distal end of the reinforcing member.
- 84. (New) A guide wire as claimed in claim 78 in which the reinforcing member extends from the major flat surface of the distal portion of the guide wire to a longitudinally extending edge, the longitudinally extending edge extending from the proximal end of the reinforcing member to the distal end of the reinforcing member.
- 85. (New) A guide wire as claimed in claim 78 in which the reinforcing member defines a central plane which coincides with the central minor plane.

REMARKS

The present invention primarily relates to a guide wire having a distal portion terminating in a guide portion. A reinforcing means (e.g., an elongated dorsal fin-like structure, (FIG. 7(b) is provided on the distal portion which minimizes axial twisting of the distal portion.

Claims 1-53, 56, and 68 are canceled. Claims 54, 55, 57-67, and 69-85 are pending. Applicants have amended pending claim 70 to insert the language "and being perpendicular to" as is shown. The language emphasizes the feature of the present invention in which the distal portion reinforcing member is required to be perpendicular to the "flat major surfaces of the distal portion". Basis for this language insertion is found in the published application relating to this invention (viz., US 2007/0032744 A1) at paragraph [0059]. No new matter is introduced.

Applicants also have added new claims 78-85. Claim 78 is based upon claim 70 and more clearly defines the relationship between the major flat surfaces of the distal end of the guide wire and the "reinforcing member". Specifically, claim 78 requires the "reinforcing member" to terminate at a location which is "axially spaced apart from the distal end of the distal portion to define with the distal end of the distal portion the guide portion." As will be shown this required foreshortening and termination of the reinforcing member at a point which is "axially spaced" from the extreme distal end of the guide wire is nowhere disclosed nor suggested by the primary reference (Osawa et al.) on which all of the present claims are rejected.

Reinterpretation of U.S. 7,083,577 to Osawa et al. ("Osawa et al.").

It is noted starting at page 2 of the Office Action that the Examiner reinterpreted the Osawa et al. primary reference. As is stated at the bottom of page 2 of the Office Action "the middle stepped section of Fig. 8-A [of Osawa et al.] is now interpreted as the "reinforcing member", while the section of lower height to its left in Fig. 8-A is now interpreted as the "guide portion",.... The Examiner further notes starting at the top of page 3 of the Office Action that the "middle section clearly extends to and terminates at a point axially spaced apart from the most distal end of the distal portion...." The Examiner's further exposition of his position is greatly appreciated by the undersigned attorney.

This reinterpretation of Osawa et al. has one very serious drawback viz., it now requires the "reinforcing member" to be in the same plane as the "flat major surfaces of the distal portion

of the guide wire". In short, the primary advantage of the reinforcing member stated in proposed-to-be amended claim 70 i.e. "minimizing axial twisting of the distal portion" has been eliminated and is not permitted by the reinterpretation of Osawa et al. In short, the reinterpretation of Osawa et al. permits the Osawa et al. device, absolutely contrary to the present invention, to be bent and to flex in a direction perpendicular to the central major plane. Thus, while the Examiner's reinterpretation of Osawa et al. is certainly creative, it does not disclose either the functional advantage or the specific structure provided by the present invention.

To emphasize the above Applicants have added, in claim 70, language indicating that the "reinforcing member" is "perpendicular to one of the flat major surfaces of the distal portion of the guide wire." That inserted language emphasizes and unambiguously distinguishes claim 70 from anything disclosed or suggested by Osawa et al. whether under its first interpretation or under its reinterpretation in the Office Action.

The same amended language is used in new claim 78. As is noted above new claim 78 has other limitations which further distinguishes it from Osawa et al., as reinterpreted, and additionally requires the reinforcing member to be "foreshortened" i.e. to terminate proximal to the extreme distal end of the guide wire.

Art rejections

Claim 70 is rejected under 201(e) over Osawa et al. The discussion above shows how no anticipation of claim 70 is shown by Osawa et al.

Dependent claims 54, 55, 57-67 and 69-77 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Osawa et al. That rejection is respectfully traversed.

All the rejected claims depend directly or indirectly upon independent claim 70. As is also noted above, Osawa et al. as reinterpreted in the Office Action which requires "a pair of opposite major flat surfaces" and the "reinforcing member" to be co-planer or at least to lie in parallel planes. The requirement of the reinforcing member and the flat surfaces defining the distal portion of the guide wire to be parallel planes precludes the presence of a structure which provides reinforcement to "minimiz[e] axial twisting of the distal portion [of the guide wire]." Cf., claim 70. This is, perhaps, best illustrated at Figs. 7(b) and 8(b) in which it is shown how guide member 38 prevents axial twisting of the distal end of the guide wire. Perhaps more to the

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point, Figs. 7(a) and 8(a) (which are not structures of claims 70-85) are the structural equivalents of the Examiner's reinterpretation of Osawa et al. Thus, it is submitted that claim 70 and all claims depending therefrom are not and cannot be anticipated under 35 U.S.C. 102 (e) by Osawa et al.

It follows that the various detailed rejections of the dependent claims should be withdrawn.

New claims 78-85

New claims 78-85 track much of the language of rejected claim 70 particularly including the requirement of the "reinforcing member" being perpendicular to one of the flat major surfaces of the distal portion of the guide wire...." That structure is nowhere disclosed nor suggested by Osawa et al. More to the point, Osawa et al., as reinterpreted to require the elements defining the distal portion of the guide wire and the reinforcing member to be at least co-planar, does not and cannot disclose or suggest claims 78-85.

Conclusion

Based upon the above claim amendments and remarks, it is clear that Osawa et al. does not "anticipate" any of the presently pending claims. There being no other rejections, it is respectfully requested that all pending claims be passed to issue.

The Examiner is invited to telephone the undersigned attorney if a phone conference can materially advance prosecution of these claims.

Respectfully submitted,

Dated: August 4, 2010

Registration No. 29,018

P.O. ADDRESS:

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